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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA-000294-1

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Equilon Enterprises LLC
Puget Sound Refining Company
PO Box 622
Anacortes WA 98221

<u>Facility Location:</u> South Texas Road March Point Anacortes WA <u>Water Body I.D. No.:</u> WA-03-0020	<u>Receiving Water:</u> Fidalgo Bay Padilla Bay (several of the stormwater discharges) <u>Discharge Locations:</u> <u>Outfalls:</u> 001 Latitude: 48° 30' 34" N Longitude: 122° 34' 36" W 001A Latitude: 48° 28' 12" N Longitude: 122° 34' 09" W Stormwater Locations are listed in Section S1.F
<u>Industry Type:</u> Petroleum Refinery	

is authorized to discharge in accordance with the special and general conditions which follow.

Carol Kraege, Supervisor
Industrial Section
Washington State Department of Ecology

TABLE OF CONTENTS

SUMMARY OF PERMIT REPORT SUBMITTALS	4
SPECIAL CONDITIONS	7
S1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	7
A. Basis of Limitations	7
B. Process Wastewater Limitations and Monitoring Requirements	7
C. Ballast and Stormwater Allocations (Outfall 001)	10
D. Outfall 001A	10
E. Firewater Testing.....	11
F. Stormwater Monitoring.....	11
G. Non-routine and Unanticipated Discharges.....	12
S2. MONITORING AND REPORTING	13
A. Reporting	13
B. Records Retention	14
C. Recording of Results.....	14
D. Sampling and Analytical Procedures.....	14
E. Flow Measurement.....	15
F. Laboratory Accreditation	15
G. Additional Monitoring by the Permittee.....	15
H. Noncompliance Notification.....	15
I. Spill Reporting and Notification	16
J. Reporting - Shellfish Protection.....	16
S3. OTHER REQUIREMENTS	16
A. Treatment Efficiency Study and Engineering Report.....	16
B. Characterization Studies	20
1. Human Health Criteria.....	20
2. Sediment Monitoring – Process Outfall 001	21
3. Dioxin Study	21
C. Composite Sample.....	23
D. Mixing Zone Descriptions	23
E. Storage Tank Wastewater.....	24
F. Operator Certification.....	24
G. Outfall Evaluation	25
H. Solid Waste Handling.....	25
I. Construction Stormwater Pollution Prevention.....	25
S4. OPERATION AND MAINTENANCE	25
A. Operations and Maintenance Manual	26
B. Bypass Procedures	26

C.	Duty to Mitigate	28
D.	Pollution Prevention Plan	28
S5.	ACUTE TOXICITY	35
A.	Effluent Limit for Acute Toxicity	35
B.	Monitoring for Compliance with an Effluent Limit for Acute Toxicity	35
C.	Sampling and Reporting Requirements	37
S6.	CHRONIC TOXICITY	39
A.	Effluent Characterization	39
B.	Sampling and Reporting Requirements	40
	GENERAL CONDITIONS	42
G1.	SIGNATORY REQUIREMENTS	42
G2.	RIGHT OF INSPECTION AND ENTRY	43
G3.	PERMIT ACTIONS	43
G4.	REPORTING A CAUSE FOR MODIFICATION	44
G5.	PLAN REVIEW REQUIRED	45
G6.	COMPLIANCE WITH OTHER LAWS AND STATUTES	45
G7.	DUTY TO REAPPLY	45
G8.	TRANSFER OF THIS PERMIT	45
G9.	REDUCED PRODUCTION FOR COMPLIANCE	46
G10.	REMOVED SUBSTANCES	46
G11.	DUTY TO PROVIDE INFORMATION	46
G12.	OTHER REQUIREMENTS OF 40 CFR	46
G13.	ADDITIONAL MONITORING	46
G14.	PAYMENT OF FEES	46
G15.	PENALTIES FOR VIOLATING PERMIT CONDITIONS	47
G16.	UPSET	47
G17.	PROPERTY RIGHTS	47
G18.	DUTY TO COMPLY	47
G19.	TOXIC POLLUTANTS	48
G20.	PENALTIES FOR TAMPERING	48
G21.	REPORTING PLANNED CHANGES	48
G22.	REPORTING ANTICIPATED NON-COMPLIANCE	48
G23.	REPORTING OTHER INFORMATION	49
G24.	REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS	49
G25.	COMPLIANCE SCHEDULES	50

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S2.A	Discharge Monitoring Report	Monthly	March 15, 2002
S2.E	Noncompliance Notification	As necessary	
S2.I	Spill Reporting and Notification	Once	May 1, 2002
S2.J	Shellfish Protection	As necessary	
S3.A	Treatment Efficiency Study – Identification of sampling points	Once	May 1, 2002
S3.A	Treatment Efficiency Study – Sampling	2 sampling intervals	Sampling complete by December 1, 2003
S3.A	Treatment Efficiency Engineering Report	once	March 1, 2004
S3.A	Treatment Efficiency Engineering Report – update analysis	once	August 5, 2006
S3.B.1.	Effluent Recharacterization for Evaluation of Human Health Criteria	4 samples /permit cycle	August 5, 2006
S3.B.2.A. 1.	Sediment Sampling and Analysis Plan	1/permit cycle	February 1, 2003
S3.B.2.B. 1.	Sediment Sampling Data Report	1/permit cycle	August 5, 2006
S3.B.3.A -B	Dioxin Study Regeneration Wastewater Effluent and Sludge Sampling	2 sludge samples and 4 regeneration effluent samples /permit cycle	
S3.B.3.C	Dioxin Study Report	1/permit cycle	No later than 3 months after the last sampling or by February 1, 2005, whichever comes first

Permit Section	Submittal	Frequency	First Submittal Date
S3.G.	Outfall Evaluation	1/permit cycle	Within 90 days of conducting the evaluation and no later than August 5, 2006
S4.A.	Treatment System Operating Plan	2/permit cycle and as necessary	By May 1, 2002, with major changes to the treatment system, and by August 5, 2006
S4.B	Reporting Bypasses	As necessary	Immediate verbal notification
S4.D.1.A.	Pollution Prevention Plan – Phase I	Once	August 1, 2003
S4.D.1.B.	Pollution Prevention Plan – Phase II	Once	August 1, 2004
S4.D.7.	Pollution Prevention Plan - Stormwater Inspections	2/year (wet and dry season)	Reported with Pollution Prevention Plan progress report
S4.D.8.	Pollution Prevention Plan Progress Report	Every 2 years following submittal of Phase I	August 1, 2005
S5.B	Acute Toxicity Compliance Monitoring	Quarterly sampling	Sampling to begin by April 1, 2002
S5.B	Acute Toxicity Compliance Monitoring Reports	quarterly	Within 60 days of test result finalization
S5.B.2	Acute Toxicity: “Causes and Preventative Measures for Transient Events.”	As necessary	
S5.B.2	Acute Toxicity TI/TRE Plan	As necessary	
S6.A	Chronic Toxicity Characterization Data	6 sampling events/ year	Sampling to begin by February 1, 2003
S6.A	Chronic Toxicity Test Sample Reports	6 data reports	April 1, 2003 and within 60 days of each sampling event
S6.A	Chronic Toxicity Tests Characterization Summary Report	1/permit cycle	Within 90 days of test result finalization

Permit Section	Submittal	Frequency	First Submittal Date
S6.C	Chronic Toxicity Compliance Monitoring Reports	Quarterly if a limit was determined to be necessary following effluent characterization	
G1.	Notice of Change in Authorization	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Application for Permit Renewal	1/permit cycle	August 5, 2006
G8	Notice of Permit Transfer	As necessary	
G21	Notice of Planned Changes	As necessary	
G22.	Reporting Anticipated Non-compliance	As necessary	

SPECIAL CONDITIONS

S1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Basis of Limitations

The effluent limitations in the permit are based on guidelines published August 12, 1985 under 40 CFR Part 419 by the Environmental Protection Agency (EPA) for the cracking subcategory of petroleum refining. These limitations are based on terms of a settlement agreement dated April 17, 1984, between EPA and the Natural Resources Defense Council resolving litigation about the EPA guidelines. The August 12, 1985 guidelines establish Best Available Technology (BAT) and Best Conventional Technology (BCT) as equal to Best Practicable Technology (BPT) for all parameters except phenols and chromium. Each of the guidelines was evaluated for phenols and chromium and whichever was most stringent was applied.

In order to protect existing water quality and preserve the designated beneficial uses of Washington's surface waters, WAC 173-201A-060 states that waste discharge permits shall be conditioned such that the discharge will meet established Water Quality Standards.

B. Process Wastewater Limitations and Monitoring Requirements

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated wastewater and stormwater at the permitted location subject to complying with the following limitations. These limitations are based on the existing and predicted composition of the crude feedstock at the time of issuance of this permit. If the quality of the feedstock changes significantly during the term of the permit, the permit will be reopened as necessary to modify the limitations after submittal and review of the modified process configuration information.

Effluent Limitations and Monitoring Requirements for Outfall #001

Parameter	Units	Effluent Limitations		Monitoring Frequency	Sample Type
		Average Monthly ^a	Maximum Daily ^b		
Biochemical Oxygen Demand (5-day) ^d	lbs/day	801	1466	Once per week ^c	24 hr composite
Chemical Oxygen Demand ^d	lbs/day	5519	10750	Once per day	24 hr composite
Total Suspended Solids ^d	lbs/day	643	1017	Once per day	24 hr composite
Oil and Grease ^d	lbs/day	236	438	Once per day ^c	grab
Oil and Grease	mg/l	The concentration of oil and grease in the discharge shall at no time exceed 15 mg/l, and shall not exceed 10 mg/l more than three days per month.		Once per day ^c	grab
Phenolic Compounds ^d	lbs/day	5.2	10.8	Once per week ^c	24 hr composite
Ammonia as N	lbs/day	583	1283	Three times per week ^c	24 hr composite
Sulfide	lbs/day	4.3	9.5	Once per week ^c	grab
Total Chromium	lbs/day	10.3	21.8	semi-annual	24 hr composite
Hexavalent Chromium	lbs/day	0.76	1.7	semi-annual	24 hr composite
Total Residual Chlorine	mg/l	0.38	0.81	Once per day	grab
Fecal Coliforms	organisms / 100mls	200/100 mls average monthly limit, 400/100 mls maximum daily		Once per week ^c	grab
Temperature	°C	Daily grab or continuous recording. There is no limitation for this parameter. Information collected shall be reported in the monthly DMR.			
Flow	MGD	Discharge flow volumes shall be continuously recorded. There is no limitation for this parameter. The monthly average and maximum daily flow shall be reported in the monthly DMR.			

Parameter	Units	Effluent Limitations		Monitoring Frequency	Sample Type
		Average Monthly ^a	Maximum Daily ^b		
Feedstock Rate barrels (bbls)	bbls per day	There is no limitation for this parameter. The monthly average shall be reported in the monthly DMR.			daily
pH	pH shall be maintained within the range of 6.0 to 9.0. pH shall be continuously recorded. Excursions between 5.0 and 6.0, or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly. In the event of a failure of continuous monitoring equipment hourly grab samples shall meet the frequency requirements or an alternative may be recommended subject to approval by the department.				
Acute Toxicity Monitoring – See Permit Condition S5					
Chronic Toxicity Monitoring – See Permit Condition S6					
Treatment Efficiency Study – Priority Pollutants and Conventionals - See Permit Condition S3.A.					
91 Human Health Criteria Monitoring of Effluent– 4 times during the permit term – See Permit Condition S3.B.1					
Sediment Monitoring - See Permit Condition S3.B.2					
Dioxin Monitoring – Catalytic Reformer Regeneration Wastewater and API sludge - See Permit Condition S.3.B.3					

^a The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. Additional allocation may be permitted for stormwater runoff and ballast water according to Permit Condition S1.C.

^b The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day. Additional allocation may be permitted for stormwater runoff and ballast water according to Permit Condition S1.C.

^c The monitoring frequencies for these parameters have been reduced based on the excellent performance of the facility. If performance levels deteriorate during the term of the permit, the monitoring frequencies shall revert to the levels required in the previous permit (BOD 3/7, Ammonia 7/7, Phenols 7/7, Sulfides 7/7, Fecal Coliforms 5/7). Ecology will notify the facility by letter to increase monitoring upon Ecology's determination of deteriorating performance.

^d Additional amounts of these parameters are authorized in accordance with subsection C which follows.

C. Ballast and Stormwater Allocations (Outfall 001)

The permittee is authorized to discharge additional amounts of the following parameters based on stormwater and ballast water flow through Outfall No. 001. Ballast water shall be determined by tank gauging or flow metering of the ballast water storage tanks. **During the summer months of June through October the permittee shall only be allowed to claim the stormwater allocation for the maximum daily value when it can be demonstrated that measurable rainfall has occurred at the refinery site during the previous 7 calendar days.** In the event that a large stormwater inventory must be released during the months of June through October, the Permittee can submit operational data supporting use of the stormwater allocation to the Department with the discharge monitoring report. Upon receipt of the supporting data, the Department will determine if the use of the stormwater allocation is appropriate and notify the Permittee by letter. The stormwater flow rate shall be determined as the difference between total measured effluent through Outfall No. 001 and the sum of ballast water plus the average dry weather flow rate. **The average dry weather flow is hereby established as 3.5 MGD.**

Parameter	Ballast Water Allocation: Outfall #001		Stormwater Allocation: Outfall #001	
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily
	Pounds/Million Gallons			
Biochemical Oxygen Demand (5-day)	210	400	220	400
Chemical Oxygen Demand	2000	3900	1500	3000
Total Suspended Solids	170	260	180	280
Oil and Grease	67	126	67	130
Phenolic Compounds	-----	-----	1.4	2.9

D. Outfall 001A

The permittee is authorized to bypass Outfall 001 and discharge excess treated effluent via Outfall 001A only in the event of an extreme weather event and to prevent overtopping of the wastewater pond dike. The permittee is required to meet the discharge and monitoring requirements for Outfall 001 as listed above. During these events wastewater shall continue to be discharged through Outfall 001 to the maximum extent possible. Discharge volume shall

be estimated and reported with the monthly discharge monitoring report. The permittee shall immediately notify the Department if Outfall 001A is used.

E. Firewater Testing

The permittee is authorized to bypass Outfall 001 and discharge treated effluent via the dockside firewater system during monthly testing of the fire suppression system. The permittee is required to meet the discharge requirements for Outfall 001 as listed above. The permittee shall report firewater testing on the monthly discharge monitoring report. Duration and an estimated flow volume shall be reported.

F. Stormwater Monitoring

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge stormwater at the following permitted locations.

Outfall Number	Outfall Location		Receiving Water
Outfall 002	Latitude: 48° 28' 00" N	Longitude: 122° 32' 15" W	Padilla Bay
Outfall 003	Latitude: 48° 28' 32" N	Longitude: 122° 32' 35" W	Padilla Bay
Outfall 004	Latitude: 48° 28' 00" N	Longitude: 122° 34' 12" W	Padilla Bay
Outfall 005	Latitude: 48° 28' 00" N	Longitude: 122° 32' 15" W	Padilla Bay
Outfall 006	Latitude: 48° 28' 06" N	Longitude: 122° 32' 27" W	Padilla Bay
Outfall 009	Latitude: 48° 28' 32" N	Longitude: 122° 32' 35" W	Padilla Bay
Outfall 010	Latitude: 48° 28' 00" N	Longitude: 122° 34' 08" W	Fidalgo Bay
Outfall 011	Latitude: 48° 28' 06" N	Longitude: 122° 34' 08" W	Fidalgo Bay
Outfall 012	Latitude: 48° 28' 08" N	Longitude: 122° 34' 08" W	Fidalgo Bay
Outfall 013	Latitude: 48° 28' 12" N	Longitude: 122° 34' 09" W	Fidalgo Bay
Outfall 014	Latitude: 48° 28' 16" N	Longitude: 122° 34' 09" W	Fidalgo Bay
Outfall 015	Latitude: 48° 28' 30" N	Longitude: 122° 34' 12" W	Fidalgo Bay
Outfall 017	Latitude: 48° 28' 46" N	Longitude: 122° 34' 20" W	Fidalgo Bay
Outfall 018	Latitude: 48° 28' 50" N	Longitude: 122° 34' 20" W	Fidalgo Bay
Outfall 019	Latitude: 48° 28' 54" N	Longitude: 122° 34' 20" W	Fidalgo Bay
Outfall 020	Latitude: 48° 29' 00" N	Longitude: 122° 34' 22" W	Fidalgo Bay
Outfall 021	Latitude: 48° 29' 04" N	Longitude: 122° 34' 23" W	Fidalgo Bay
Outfall 022	Latitude: 48° 29' 06" N	Longitude: 122° 34' 24" W	Fidalgo Bay
Outfall 023	Latitude: 48° 29' 14" N	Longitude: 122° 34' 27" W	Fidalgo Bay
Outfall 024	Latitude: 48° 29' 20" N	Longitude: 122° 34' 30" W	Fidalgo Bay
Outfall 025	Latitude: 48° 29' 34" N	Longitude: 122° 34' 28" W	Fidalgo Bay

Beginning on the effective date of this permit, the Permittee shall monitor stormwater from **Outfalls 002, 003, 005 and 006** during a qualifying storm, defined as follows: minimum 0.1" rainfall volume, no fixed maximum rainfall volume, antecedent dry period 24 hours. Samples will be analyzed for the parameters listed below at the specified frequencies. Outfall 002 and 005

commingle near the source of the flows. One sample may be collected to represent the commingled flow. If any combined sample indicates contamination, as determined by Ecology, then the permittee shall repeat the sampling on each individual discharge.

Grab samples must be collected within the first 60 minutes after discharge begins to catch the “first flush” portion of the runoff event, or each drainage can be analyzed to determine the appropriate time period to achieve first flush capture.

The Permittee shall submit the results of the stormwater monitoring to the Department within 60 days after the sampling event.

Parameter	Monitoring ^a Frequency	Sample Type
pH	Twice/year	grab
Total Suspended Solids	Twice/year	grab
Biochemical Oxygen Demand (5-day)	Twice/year	grab
Chemical Oxygen Demand	Twice/year	grab
Oil & Grease	Twice/year	grab

^a The Department will review the results of the first and second year's stormwater monitoring and after implementation of pollution prevention stormwater projects. If no problems are noted, the monitoring frequency may be reduced to annually upon receipt of written notification from the Department. Outfall 002 monitoring may be eliminated, upon receipt of written notification from the Department, following implementation of a Pollution Prevention Project and if the data indicate it is no longer a problem.

G. Non-routine and Unanticipated Discharges

Beginning on the effective date of this permit, the Permittee may discharge non-routine wastewater from Outfall 003 on a case-by-case basis if approved by the Department. Prior to any such discharge, the Permittee shall contact the Department and **at a minimum** provide the following information:

1. The nature of the activity that is generating the discharge.
2. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
3. The total volume of water expected to be discharged.

4. The results of the chemical analysis of the water. The water shall be analyzed for all constituents limited for the Permittee's discharge. The analysis shall also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by the Department. All discharges must comply with the effluent limitations as established in Condition S1. of this permit, water quality standards, sediment management standards, and any other limitations imposed by the Department.
5. The date of proposed discharge and the rate at which the water will be discharged, in gallons per minute. The discharge rate shall be limited to that which will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
6. If the proposed discharge is to a municipal storm drain and is approved by the Department, the Permittee shall notify the municipality of the discharge.

The discharge may not proceed until the Department has reviewed the information provided and has authorized the discharge. Authorization from the Department will be by letter to the Permittee or by an Administrative Order.

S2. MONITORING AND REPORTING

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring results obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department. **In addition, a summary sheet, listing daily results for the parameters tabulated in Special Condition S1, including MDLs, and QLs (when applicable), shall be submitted to the Department.** The report and summary sheet shall be sent to the Department of Ecology, Industrial Section, P. O. Box 47706, Olympia, Washington 98504-7706. Monitoring shall be started on the effective date of the permit and the first report is due on the **15th day of the following month**. Monitoring results obtained during the month shall be summarized on the Discharge Monitoring Report (DMR) Form (EPA 3320-1) or equivalent and submitted no later than the 15th day of the following month, unless otherwise specified in this permit.

All lab reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of

analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), lab practical quantitation limit (PQL), reporting units and concentration detected.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge or the facility was not operating during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least **3 years**. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department.

E. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. **Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year.** Calibration records shall be maintained for a minimum of three years.

F. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, pH, and internal process control parameters are exempt from this requirement. pH shall be accredited if the laboratory must otherwise be registered or accredited.

G. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant in the final effluent more frequently than required by this permit (S1.) using test procedures specified by Condition S.2.D. of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

H. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, correct the problem and, if applicable, repeat sampling and analysis of any violation immediately and submit the results to the Department within 30 days after becoming aware of the violation;
2. Immediately notify the Department of the failure to comply; and

3. Submit a detailed written report to the Department within thirty days or with subsequent DMR (within 5 days for upsets and bypasses), unless requested earlier by the Department. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

I. Spill Reporting and Notification

The Permittee shall prepare a description of the reporting system which will be used by the facility to alert responsible managers and legal authorities in the event of a spill or unplanned discharge of: 1) oil and petroleum products, 2) materials, when spilled or otherwise released into the environment, are designated Dangerous Waste (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or 3) materials which may become pollutants or cause pollution upon reaching state waters.

The reporting system description shall be submitted to the Department by **May 1, 2002**.

The Permittee shall notify the Department of any spills or unplanned discharges of the materials described above and in accordance with the facility's reporting system.

J. Reporting - Shellfish Protection

If an unauthorized sanitary system discharge, such as collection system overflows, plant bypasses, or disinfection system failure, has the potential to exceed the specified effluent limitations, the discharge shall be reported **immediately** to the Department of Ecology, the Department of Health Shellfish Program and the Swinomish Tribal Community. The Department of Ecology's Northwest Regional Office 24-hr number is **206-649-7000**, the Department of Health's Shellfish Program 24-hr number is **360-786-4183**, and the Swinomish Tribal community 24-hr number is **(360) 416-2146**.

S3. OTHER REQUIREMENTS

A. Treatment Efficiency Study and Engineering Report

The Permittee shall conduct chemical analyses of influent and effluent samples collected from several points within the wastewater treatment system to determine treatment and removal efficiencies. At the time of

sampling the flow through the treatment units shall be monitored and recorded. Acceptable methods of monitoring shall include; in pipe metering, measuring dye concentrations, or any other method approved by Ecology.

Influent and effluent samples shall be collected from the following points:

- 1) a sampling point upstream of the API forebays but as near as possible to the forebays,
- 2) effluent from the equalization tank,
- 3) secondary clarifier effluent,
- 4) final effluent from the final holding pond
- 5) stormwater discharge into final pond

The **specific** influent and effluent sampling points shall be identified on a flow diagram of the wastewater treatment system. The flow diagram shall identify all extraneous wastewater streams to the individual treatment units, including recycle streams. The sample points shall be selected to be representative of each wastewater stream without the influence of recycle streams. Flow monitoring method and monitoring points shall also be identified for each treatment system (process and stormwater). This information shall be submitted to Ecology **by May 1, 2002**.

By December 1, 2003, Influent and effluent sampling shall be conducted during two separate intervals; **each interval composed of six (6) 24-hour sampling periods**. One interval shall be conducted when the effluent plant is processing **primarily** dry weather flow; the other interval shall be conducted when the effluent plant is treating wet weather flow. Minor precipitation events during the dry weather sampling are not expected to impact the data significantly but they shall be recorded if they occur. Sampling intervals shall be spaced at least one month apart.

Samples shall be collected when the wastewater treatment system is in a relatively steady state. The timing shall be such that the effluent samples from each point correspond to the upstream influent samples and the resultant analytical results can be effectively used to estimate removal efficiencies across the applicable portions of the treatment system.

The following table summarizes the required monitoring to evaluate the efficiency of the treatment system.

	Wet Weather Flow Interval	Dry Weather Flow Interval
Full suite of parameters with automated 24 hour composite sampler	1 set	1 set
BOD & TSS composite samples (6 equally spaced grab composited samples acceptable)	5 sets	5 sets
Oil & Grease grab samples	5 sets	5 sets
'Set' being one 24-hour composite sample collected at each of the identified sampling points.		

During one wet and one dry weather interval samples from each location shall be analyzed for the following conventionals and non-conventionals: BOD, COD, ammonia, TKN, TSS, and sulfide; priority pollutant metals and cyanide; priority pollutant volatiles; and priority pollutant base/neutral/acids. The preceding analyses correspond to the "full suite" designation in the above table. With the exception of O&G, samples at all locations shall be representative 24-hour composites collected with automatic samplers or at minimum consist of six grab samples equally spaced over a 24-hour period. Separate grab samples shall be collected at each sample location and analyzed for oil & grease.

Priority pollutant scans for this study may be done in conjunction with those scans required for human health characterization wherever the timing is appropriate. A priority pollutant list with CAS numbers and minimum detection limits is provided in **Appendix A**. The priority pollutant scan may exclude PCB's, PBB's, and all pesticides except any listed pesticide that is used on the refinery site.

During the same wet and dry weather sampling intervals that samples are collected to analyze for priority pollutants, **five additional sets of composite samples** shall be collected during each sampling interval at all sample locations and analyzed for **BOD₅, TSS, and oil and grease**. The samples for BOD₅ and TSS shall be representative 24-hour composites consisting of continuous sampling or six grab samples equally spaced over a 24-hour period. Separate grab samples shall be collected at each location and analyzed for oil & grease.

Sample analysis shall be conducted in accordance with 40 CFR 136 and/or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department). The Permittee shall follow the quality assurance procedures in 40 CFR 136 and/or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

The Permittee shall also prepare an engineering report on the wastewater treatment system. The report shall be prepared in accordance with Chapter 173-240 WAC and include the following elements:

- 1) A schematic of the treatment units.
- 2) The last 3 years of flow data through the treatment units including recycle streams. Flow data shall be presented in terms of average dry weather flow, average monthly flow of the maximum month, and peak hourly flow. If flow-monitoring data is not available for wastewater streams then an estimate shall be provided with the method used for estimation.
- 3) Basic design data and sizing calculations for each unit in the wastewater treatment system. Clarifier information should include detention times, overflow rates, solids and weir loading rates, volume and depth. Activated sludge basin information shall include hydraulic detention time, volumetric loading, MLSS, F:M ratio, return ratio, and sludge residence time. Information for settling ponds shall include solids loading rates, volume and retention time. This information shall be provided for design criteria parameters – COD, BOD, TSS, and oil and grease, where applicable.
- 4) An analysis of current treatment and removal efficiencies and current operating conditions for each treatment unit based on information collected in the treatment efficiency study described above.
- 5) Predicted design capacities including hydraulic and organic loadings for each wastewater treatment unit under the flow conditions described above in (2). The predicted design capacities shall be based on the information collected during the study, the previous 3 years of flow data and any additional relevant information collected by the Permittee.
- 6) Predicted effluent wastewater characteristics at design flows.

The engineering report shall be submitted to the Department for review and approval by **March 1, 2004**.

By August 5, 2006, the Permittee shall submit an analysis to the Department that compares current conditions within the refinery to the predicted design capacity of the wastewater treatment system, as determined in the approved engineering report. The analysis shall also predict the next permit term's production increases and the resultant

impacts to the wastewater treatment system capacity. The report shall include a discussion of any production increases, changes to crude sources, modifications to process units, changes in additives, etc., that could potentially cause a change in wastewater characteristics

B. Characterization Studies

1. Human Health Criteria

Washington's water quality standards now include 91 numeric health-based criteria in addition to the aquatic life criteria. The human health criteria were promulgated for the state by the U.S. EPA in its National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The discharge must be evaluated for reasonable potential to violate the human health criteria. Human health criteria are required to be met at the edge of the chronic zone. The mixing zone design conditions for human health criteria are different from that allowed for aquatic life criteria and result in a different allowable dilution. In order to more thoroughly evaluate human health criteria the permittee shall recharacterize the effluent by sampling for the 91 human health criteria listed pollutants, excluding PCB's, PBB's, asbestos, and all pesticides except any listed pesticide that is used on the refinery site. In addition to the human health criteria, the final effluent shall be analyzed for dibenzofuran, using EPA Method 8270 or its equivalent. The effluent shall be sampled and analyzed **4 times** during the life of the permit. The sampling events shall be spaced at least 6 months apart. The data shall be submitted **by August 5, 2006**. Priority pollutant scans for this requirement may be completed in conjunction with those scans required for the treatment efficiency study wherever the timing is appropriate. At least two of these sampling events shall coincide with the discharge of pollutants from the catalytic reformer regeneration process.

Most parameters have had adequate detection levels in previous priority pollutant scans. Certain human health parameters require more stringent testing than that required for aquatic life criteria. Those parameters are specifically listed below. Included in that list are the minimum detection levels necessary to determine if the permittee is in compliance with human health criteria. The detection level required is dependent on the number of sample events (4 events are assumed). The available dilution and the number of sample events have been factored into the detection limit determination.

PARAMETER	MDL in µg/L
Benzidine	.08
Hexachlorobenzene	.12

The detection level for the listed parameters may not be achievable because of the limitations of the available methods. The permittee is required to achieve the best detection limit reasonably obtainable, for their specific wastewater effluent, using approved test methods. The permittee shall notify the Department upon determining a detection limit is not achievable and include an explanation with the test results.

2. Sediment Monitoring – Process Outfall 001

The permittee shall submit to the Department for review and approval a **Sediment Sampling and Analysis Plan** for recharacterization sediment monitoring no later than **February 1, 2003**. The purpose of the plan is to recharacterize the sediment quality in the vicinity of the Permittee's discharge locations.

Following Department approval of the Sediment Sampling and Analysis Plan, sediments shall be collected and analyzed. The Permittee shall submit to the Department a **Sediment Data Report** containing the results of the sediment sampling and analysis **by August 5, 2006**.

A. Sediment Sampling and Analysis Plan

1. The permittee shall prepare a Sediment Sampling and Analysis Plan following the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology, 1995).
2. The Sediment Sampling and Analysis Plan shall include 6 - 10 discrete sampling stations in the vicinity of the discharge. These sampling stations shall not include the required reference and ambient stations.

B. Sediment Data Report

1. The Sediment Data Report shall conform to the approved Sampling and Analysis Plan.

3. Dioxin Study

A. Wastewater

The Permittee shall monitor the chlorinated dioxin and furan (2,3,7,8-Cl substituted tetra- through octa-congeners) concentrations in the wastewater stream from each of the catalytic reformer units during regeneration of the catalyst two times during the permit term, beginning with the first reformer to be regenerated after **February 1, 2002**, and

continuing with each subsequent reformer regeneration until each reformer has been sampled 2 times, for a total of 4 sampling events. A grab sample shall be collected from each caustic wash during the regeneration of each reformer unit. The total flow from each caustic wash shall be measured.

The Permittee shall sample the final effluent for the chlorinated dioxins and furans (2,3,7,8-Cl substituted tetra- through octa- congeners) and dibenzofuran on two different occasions. Sampling events shall be timed to capture effluent that is most likely to contain wastewater generated during the catalytic reformer regeneration events that are sampled for dioxins in the caustic wash water. One sample shall be taken during the regeneration of Reformer #1 and the second must be taken during the regeneration of Reformer #2.

Analysis including sample containers and QA/QC shall be conducted in accordance with Method 1613: Tetra- through Octa- Chlorinated Dioxins and Furans by Isotopic Dilution HRGC/HRMS, USEPA Office of Water, Engineering and Analysis Division, Revision A. The Minimum Level (ML) of detection for 2,3,7,8- TCDD/TCDF shall be 10 parts per quadrillion or less. The Permittee shall report the lowest detected concentrations of all 2,3,7,8-Cl substituted dioxins and furans that meet the quality assurance specifications of Method 1613, including all detected concentrations below the calibration limits of Method 1613.

B. API Sludges

The Permittee shall analyze **two grab samples** of the API separator sludge for chlorinated dioxins and furans (2,3,7,8-Cl substituted tetra-through octa-congeners). Sampling events shall be timed to capture sludges generated during the catalytic reformer regeneration events that are sampled for dioxins in the caustic wash water. One sample shall be taken during the regeneration of Reformer #1 and the second must be taken during the regeneration of Reformer #2.

Analysis including sample containers and QA/QC shall be conducted in accordance with, Method 8290, Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS), SW-846, Test Methods for Evaluating Solid Waste, USEPA, Office of Solid Waste, September, 1994. The Minimum Level (ML) of detection for the chlorinated dioxins and furans shall be 5 parts per trillion. The Permittee shall report concentrations of all 2,3,7,8-Cl substituted dioxins and furans detected, including those detected below the ML where the method detection limit is below the ML.

C. Dioxin Study Report

The Permittee shall submit to the Department a **Dioxin Study Report** containing the results of the sampling and analysis **no later than 3 months after the last sampling event or by February 1, 2005** whichever comes first.

The wastewater data report to Ecology shall include: date sampled, total flow for each wash, and the concentration of the 2,3,7,8-Cl substituted tetra- through octa- dioxin and furan congeners from each caustic wash. The Permittee shall require the laboratory to report and maintain on file for each sample set: the analytical holding times, summary of internal precision and recovery, calibration data, analysis sequence (run logs), daily checks (ongoing precision and accuracy standards, blanks, instrument checks), QA/QC data (duplicates, matrix spikes/labeled analog spikes), and raw data (chromatograms).

The sludge data report to Ecology shall include: date sampled, an estimate of sludge volume (dry weight), and the concentration of the 2,3,7,8-Cl substituted tetra- through octa- dioxin and furan congeners from each sludge sample. The Permittee shall require the laboratory to report and maintain on file for each sample set: the analytical holding times, summary of internal precision and recovery, calibration data, analysis sequence (run logs), daily checks (ongoing precision and accuracy standards, blanks, instrument checks), QA/QC data (duplicates, matrix spikes/labeled analog spikes), and raw data (chromatograms).

C. Composite Sample

After a portion of the daily composite sample is removed for the Permittee's analysis, the remainder, 2-3 gallons (minimum) shall be retained until 5:00 PM. The composite sample shall be kept refrigerated at 4° Centigrade in the dark during collection and storage.

D. Mixing Zone Descriptions

Outfall 001

The maximum boundaries of the mixing zones are defined as follows:

Chronic Mixing Zone

WAC 173-201A-100(4)(b)(i) specifies mixing zones shall not extend in any horizontal direction from the discharge ports for a distance greater than 200 feet plus the depth of water over the discharge ports as measured during mean lower low water (MLLW). Given a MLLW water depth of 40 feet (12.2 meters) for the Permittee's outfall, the horizontal distance therefore is 240 feet (73.2 meters).

The mixing zone is a circle with radius of **240 feet (73.2 meters)**. measured from the center of each discharge port. The mixing zone extends from the seabed to the top of the water surface. Chronic aquatic life criteria and human health criteria must be met at the edge of the chronic zone.

Acute Mixing Zone

WAC 173-201A-100(8)(b) specifies that in estuarine waters a zone where acute criteria may be exceeded shall not extend beyond 10% of the distance established for the maximum or chronic zone as measured independently from the discharge ports. The acute mixing zone is a circle with radius of **24 feet (7.3 meters)** measured from the center of each discharge port. The mixing zone extends from the seabed to the top of the water surface. Acute aquatic life criteria must be met at the edge of the acute zone.

	Available Dilution
Acute Aquatic Life Criteria	62
Chronic Aquatic Life Criteria	127
Human Health Criteria - Carcinogen	152
Human Health Criteria - Non-carcinogen	127

Stormwater Outfalls

The mixing zone discussed below apply to the stormwater outfalls listed in Permit Section S1.F. The maximum boundaries of the mixing zones for the stormwater outfalls are defined as follows:

Each stormwater mixing zone shall extend from the discharge pipe in a horizontal direction of no greater than 200 feet plus the depth of water at the discharge pipe as measured during mean lower low water but shall not occupy greater than 25% of the width of the water body as measured during mean lower low water.

E. Storage Tank Wastewater

The operation of removing wastewater from oil, product, and intermediate distillate storage tanks shall be performed in a manner and with facilities as required to prevent the wastewater from draining or spilling onto the ground.

F. Operator Certification

The operator in responsible charge of facilities that treat sanitary waste, or a combination of sanitary, commercial, or industrial waste shall be certified in accordance with the provisions of Chapter 70.95B RCW and Chapter 173-230 WAC.

G. Outfall Evaluation

The Permittee shall inspect, once per permit cycle, the submerged portion of the outfall line and diffuser to document its integrity and continued function. Within **90 days** of conducting the outfall evaluation, the inspection report shall be submitted to the Department. If conditions allow for a photographic verification, it shall be included in the report. The report shall be submitted no later than **August 5, 2006**.

H. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water. The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available, and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

I. Construction Stormwater Pollution Prevention

A Stormwater Pollution Prevention Plan (SWPP) for construction activity, including construction dewatering, shall be prepared and implemented prior to the start of each construction project. Project details for each construction project shall be submitted to the Department at least 90 days prior to the start of construction. Each plan shall be prepared in accordance with the objectives and requirements identified in Special Condition S.9. included in the National Pollutant Discharge Elimination System and State Waste Discharge General Permit for stormwater discharges associated with construction activities issued by Ecology on October 4, 2000.

The permittee is responsible for achieving compliance with state of Washington surface water quality standards (Chapter 173-201A WAC), sediment management standards (Chapter 173-204 WAC), ground water quality standards (Chapter 173-200 WAC), and human health based criteria in the National Toxics Rule (Federal Register, Vol. 57, No. 246, Dec. 22, 1992, pages 60848-60923). Where construction sites are not in compliance with these standards, the permittee shall take immediate action(s) to achieve compliance by implementing additional BMPs and/or improved maintenance of existing BMPs.

S4. OPERATION AND MAINTENANCE

The Permittee shall, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate

quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Operations and Maintenance Manual

An updated Treatment System Operating Plan (TSOP) shall be submitted to the Department **by May 1, 2002** and **by August 5, 2006**. This plan shall be updated and submitted, as necessary, to include requirements for any major modifications of the treatment system.

For the purposes of this NPDES permit, a TSOP is a concise summary of specifically defined elements of the O&M Manual. The TSOP shall not conflict with the O&M Manual and shall include the following information:

1. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limitations of S1. at the production levels used in developing these limitations.
2. In the event of production rates, which are below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.
3. In the event of an upset, due to plant maintenance activities, severe stormwater events, start ups or shut downs, or other causes, the plan shall describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting shall be described in the plan.
4. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to

the bypass. The Permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

This bypass is permitted only if:

Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

The Department is properly notified of the bypass as required in condition S2H of this permit.

3. Bypass which is Anticipated and has the Potential to Result in Noncompliance of this Permit.

The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent

practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

D. Pollution Prevention Plan

The Permittee shall continue to ensure proper operation and maintenance of the refinery process units and wastewater treatment system by following existing Standard Operating Procedures (SOPs) and Best Management Practices (BMPs). These procedures and other measures/facilities currently employed at the refinery to prevent or minimize the potential for release of pollutants to the wastewater treatment system, stormwater, and/or waters of the state shall be continued or maintained unless modified by the pollution prevention plan required below.

The Permittee shall develop a pollution prevention plan for sources of water pollutants. The objective of the pollution prevention plan is to identify pollution prevention opportunities and implement those opportunities that are technically and economically achievable

1. Plan Development and Implementation

The Permittee shall develop, implement, and comply with the pollution prevention plan in accordance with the following schedule:

- A. The Permittee shall develop a pollution prevention plan that addresses the **Phase I requirements** of Permit Condition S.4.D.3. The plan shall be submitted to the Department for review and approval **by August 1, 2003**.
- B. The Permittee shall develop **Phase II of the pollution prevention** plan as required in Permit Condition S.4.D.4. and submit it to the Department for review and approval **by August 1, 2004**.
- C. The Permittee shall implement selected pollution prevention opportunities according to the timeframes specified in the plan or any plan modifications thereof.

Guidance used in developing a pollution prevention plan shall include the document Stormwater Pollution Prevention Planning for Industrial Facilities published by the Department of Ecology, the 'Pollution Prevention and Best Management Practices' section of the Ecology Permit Writer's Manual (Chapter XII.), the methodologies of the Pollution Prevention Planning Guidance Manual for Chapter 173-307 WAC (Revised December 1996) -- Worksheets G and H, and other information provided by the Ecology Permit Manager. The Permittee is expected to apply the methodologies from the existing guidance to cover other sources, pathways, or measures not covered within the strict scope of the WAC 173-307 guidance. Other information available to the Permittee may also be used in preparing the plan.

The approved pollution prevention plan and any modifications to the plan shall be followed throughout the term of the permit.

2. General Requirements

- A. Plan Retention and Record Availability:
The pollution prevention plan shall be retained onsite or within reasonable access to the site. Staff training records shall be maintained onsite and be available for inspection.
- B. Modifications:
The Permittee shall modify the pollution prevention plan whenever there is a change in design, construction, operation, or maintenance of the facility which significantly increases the generation or potential generation of water

pollutants or causes the pollution prevention plan to be less effective in controlling pollutants. The Permittee shall provide for implementation of any modifications to the pollution prevention plan in a timely manner.

Modifications to the plan shall be submitted to the Department in the biennial report required in Permit Condition S.4.D.8.

3. Specific Requirements - Phase I

A. Policy Statement and Signature:

The pollution prevention plan shall include a policy statement articulating management and corporate support for the plan and a commitment to implement the plan and to continued pursuit of pollution prevention opportunities. The plan and all its modifications shall be signed in accordance with Permit Condition G1.

B. Employee Involvement, Training, and Awareness:

The pollution prevention plan shall include a description of personnel training and employee involvement programs that emphasize pollution prevention and solicit employee ideas about pollution prevention opportunities and other environmental issues.

C. Description of Current Pollution Prevention Activities:

The plan shall include a description of preventive measures and facilities already employed at the refinery to prevent, reduce, eliminate, or control releases of pollutants to influent wastewater streams, stormwater, and/or waters of the state.

D. Description of Potential Pollutants and Sources:

The pollution prevention plan shall include a detailed description of the processes or activities that contribute or potentially contribute pollutants to influent wastewater streams having daily average flow rates of equal to or greater than 30 gpm at the point where the wastewater stream enters the collection system, the catalytic reformer spent caustic and washwater waste stream, stormwater, groundwater, and wetlands}. Minor incidental wastestreams to stormwater, such as landscaping fertilizers, do not have to be included. The plan shall identify the materials used, processed, stored, treated, or disposed of at the

facility and the pollutants that are generated or potentially generated or released. The level of detail provided in the plan should be sufficient to help identify and understand how and why materials are used and pollutants generated or released. Process flow diagrams and/or material input/output information shall be included on a process unit basis.

The Permittee shall include in the plan all materials which may become pollutants or cause pollution upon reaching state waters, including, but not limited to: 1) persistent bioaccumulative and toxic chemicals (PBT's), 2) oil and petroleum products and, 3) materials which, when spilled or otherwise released into the environment, would be designated Dangerous Waste (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070.

In determining which sources and pollutants to address in the plan, the Permittee shall use available sampling data, such as influent characterization data collected in the treatment efficiency study (Permit Condition S.3.A., as well as knowledge of processes and materials, and available information on the relative toxicity or hazard of materials. Sources of PBT's shall be included in the analysis.

E. Identification, Preliminary Evaluation, and Prioritization of Pollution Prevention Opportunities:

The plan shall identify pollution prevention opportunities and provide a preliminary evaluation of each opportunity's technical (including safety considerations) and economic feasibility. Based upon this evaluation and other factors, the opportunities shall be prioritized. In ranking opportunities, the Permittee shall consider pollutant loading and toxicity and the potential to achieve the greatest reduction with respect to time and costs.

The Permittee shall concentrate on opportunities that reduce or eliminate PBT's, priority pollutant metals, and diethanolamine (DEA) to influent and upstream flows to the oily water sewer. Solids and hydrocarbon loadings to the oily water sewer shall also be evaluated. Stormwater shall be evaluated for oil and grease and solids loading as well as toxics. The permittee shall evaluate opportunities to eliminate or reduce pollutant loadings in particular the suspended solids loadings to stormwater outfall 002.

The Permittee shall provide their rationale for how the pollution prevention opportunities are prioritized. In addition to technical

and economical feasibility, other factors may influence ranking of opportunities and should be included in the discussion. These factors may include capital projects planned or ongoing at the refinery that will provide a benefit to environmental media other than water, corresponding reduction in safety risks, etc. Projects that achieve the highest environmental benefit shall have greater priority.

4. Specific Requirements - Phase II

In Phase II of the plan, the Permittee shall provide a detailed analysis of technical and economical feasibility for the top ten pollution prevention opportunities (if more than ten opportunities were identified), as prioritized in the approved Phase I submittal of the plan.

In evaluating and selecting pollution prevention opportunities, the Permittee shall give preference first to those that eliminate, avoid, or reduce the generation of water pollutants at the source, second to those that recycle or reuse the pollutants, and third to those that provide at-source or near-source treatment to remove pollutants or render them less toxic or harmful.

Opportunities determined to be technically and economically feasible will be considered as known, available, and reasonable and therefore are required to be selected and scheduled for implementation. For each pollution prevention opportunity selected, the plan shall identify the process(es) or activities it affects, an estimate of the amount of pollutants reduced, and the environmental or other benefits that will be achieved.

The plan shall include a schedule for implementation of each selected opportunity. The Permittee is expected to establish reasonable priorities and schedules for implementation to achieve the greatest reduction in pollutant quantity and toxicity, as well as for management and fiscal necessity.

If a detailed analysis of technical and economical feasibility for any pollution prevention opportunity will take longer than the time allotted for developing Phase II of the plan, the Permittee shall include a schedule for completing the analysis in the Phase II plan submittal. The timeframe for implementing any opportunities scheduled for further evaluation and then selected shall be provided in the biennial report.

5. Considerations in Identifying, Evaluating, and Selecting Opportunities

A. In identifying, evaluating, and selecting pollution prevention opportunities for implementation, the Permittee shall consider the following for the catalytic reformer spent caustic and washwater waste stream and any wastewater stream that has a daily average flow rate equal to or greater than 30 gpm:

1. All reasonably expected activities and conditions, such as normal operations, maintenance, and other ancillary activities; equipment failure; improper operation; upsets, accidents, spills, leaks; and natural events such as rainfall, snowfall, etc.
2. All areas of the refinery with potential to generate water pollutants including process units, raw material and product storage, handling and transfer facilities, material handling areas, maintenance areas, solid and hazardous waste storage, treatment, and disposal, and stormwater systems

The Permittee shall not be required to sample each stream analytically and may use engineering judgement to assess material inputs and outputs on a process unit basis.

B. Cross-media shift of pollutants should be avoided, unless a clear net environmental benefit results, and compliance with standards applicable to other media or management programs would be maintained.

C. The following are examples of pollution prevention opportunities that may warrant evaluation:

1. Improving and/or establishing new management practices and standard operating procedures addressing: increased training or supervision; improvements in inventory control, materials and waste handling, general operations, and housekeeping; preventive maintenance; and remedial measures
2. Process or equipment modifications, including re-engineering processes to use less toxic input materials or to utilize by-products
3. Material substitution
4. Reducing material inputs

5. Recycle/reuse of refinery waste, by-products, or process materials and fluids
6. Application of water conservation methods, including water reuse
7. Waste segregation and separation
8. Alternative and/or enhanced treatment technology, including upstream treatment of pollutants

Other pollution prevention opportunities referenced in guidance documents may also be considered.

6. Incorporating Other Pollution Prevention Plans

The Permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into the pollution prevention plan become enforceable requirements of this permit.

7. Stormwater Inspections

The Permittee shall conduct **two stormwater inspections per year; one during the wet season (October 1 - April 30) and the other during the dry season (May 1 - September 30).**

- A. The wet season inspection shall be conducted during a rainfall event and shall include observations of the presence of any floating materials, suspended solids, oil and grease, discolorations, turbidity, odor, etc. in stormwater runoff throughout the refinery that could contribute to a discharge off-site.
- B. The dry season inspection shall determine the presence of unpermitted non-stormwater discharges such as sanitary wastewater, non-contact cooling water, process wastewater, and drainage from raw material/product/waste storage to the stormwater drainage system. If an unpermitted, non-stormwater discharge is discovered, the Permittee shall immediately notify the Department.

Inspections shall be conducted by staff who are knowledgeable and trained in the application of BMPs and pollution prevention activities at the refinery.

8. Plan Evaluation and Biennial Reporting

The Permittee shall periodically evaluate the pollution prevention plan to ensure that it has been updated or otherwise modified to reflect current conditions, that measures to reduce or eliminate pollutant loadings selected in the plan are adequate and are being properly implemented in accordance with the terms of the permit, and whether any additional controls are needed. The plan shall be modified to include any changes as a result of this evaluation.

The Permittee shall submit a **progress report** by **August 1, 2005 and every two years thereafter**. The report shall identify the implementation status of each pollution prevention opportunity selected for implementation, the benefits or other results of implementation actions completed, and any modifications or updates to the plan. The report shall also include a summary of the results of stormwater inspections.

9. Continuous Improvement

In maintaining, implementing, and updating the pollution prevention plan, the Permittee is encouraged to employ continuous improvement principles, including the systematic and ongoing identification, evaluation, and implementation of pollution prevention opportunities in all decisions having environmental consequences.

S5. ACUTE TOXICITY

A. Effluent Limit for Acute Toxicity

The effluent limit for acute toxicity is no statistically significant difference in survival between the control and a 1.6 % effluent concentration.

The acute critical effluent concentration (ACEC) is the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S3.D. of this permit. The ACEC equals **1.6 %** effluent.

B. Monitoring for Compliance with an Effluent Limit for Acute Toxicity

1. Monitoring for Compliance

The Permittee shall conduct monitoring to determine compliance with the effluent limit for acute toxicity. The acute toxicity tests shall be performed

using 100% effluent, the ACEC (1.6 %), and a control. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section. **Testing** shall begin **by April 1, 2002**. A **written report** shall be submitted to the Department **within 60 days after each of the test results are final**. The percent survival in 100% effluent shall be reported along with all compliance monitoring results.

Compliance monitoring shall be conducted quarterly using each of the species and protocols listed below on a rotating basis:

- A. Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F)
- B. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hour static test, method: EPA/600/4-90/027F).

If any acute toxicity test conducted for compliance monitoring at the ACEC determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001), the Permittee is in violation of the effluent limit for acute toxicity in subsection A. and shall immediately implement subsection C. If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

2. Response to Noncompliance with an Effluent Limit for Acute Toxicity

Additional Testing. If a toxicity test conducted for compliance monitoring under subsection B. determines a statistically significant difference in response between the ACEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the LC₅₀ and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection B. after completion of the additional compliance monitoring. If the Permittee fails an acute monitoring test, compliance with the process of additional testing, a transient toxicity report or, if toxicity persists, an approved TI/RE plan is considered compliance with the acute limit.

Anomalous Tests. If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the

Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

Transient Toxicity Report. If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

Toxicity Identification/Reduction Evaluation (TI/RE) Plan. If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a TI/RE plan to the Department within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2). The TI/RE plan shall address areas where adequate guidance, procedures, or protocols are not available for implementation of the plan. The Permittee shall submit a revised TI/RE plan, in accordance with Department comments, within 30 days after receipt of the Department's comments. The Department will issue an administrative order to require implementation of the TI/RE in accordance with WAC 173-205-100(3).

In the event of failure to pass the test described in subsection S.6.B.1 of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection S.6.B.2 are being met to the satisfaction of the Department.

C. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test

methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets and reference toxicant results.

2. Testing shall be conducted on effluent grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius or less immediately after being collected and shall be sent to the lab as soon as practicable upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria in the EPA manual listed in subsection A.. and in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A. Dilution water for toxicity testing shall be laboratory water of sufficient quality for good control performance.
6. The whole effluent toxicity test series shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include a **1.6 %** dilution (the ACEC).
8. All whole effluent toxicity tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S6. CHRONIC TOXICITY

A. Effluent Characterization

Prior to February 1, 2003, the Permittee shall **begin chronic toxicity testing** on the final effluent. The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

A written report shall be submitted to the Department **within 60 days after the sample date**. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Effluent testing for chronic toxicity shall be conducted every other month for one year (six times). The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include a 1.6% effluent dilution (the ACEC). The Permittee shall compare the 1.6% effluent dilution result to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following two species and the most recent version of the following protocols:

Saltwater Chronic Toxicity Test Species		Method
Topsmelt or Silverside minnow	<i>Atherinops affinis</i> or <i>Menidia beryllina</i>	EPA/600/R-95/136 or EPA/600/4-91/003
Pacific oyster/ Mussel	<i>Crassostrea gigas</i> / <i>Mytilus sp.</i>	EPA/600/R-95/136

The Permittee shall use the West Coast fish (topsmelt, *Atherinops affinis*) for toxicity testing unless the lab cannot obtain a sufficient quantity of a West Coast species in good condition in which case the East Coast fish (silverside minnow, *Menidia beryllina*) may be substituted.

The Pacific oyster and mussel tests shall be run in accordance with EPA/600/R-95/136 and the bivalve development test conditions in the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof. The laboratory shall use whichever one of the two species that will give a valid result in each particular test.

B. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection B. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection B or pristine natural water of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include a 1.6% effluent concentration and a 0.8% effluent concentration.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

- A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by a person described above and submitted to the Department.
 - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information,

including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.
- C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
 - 1. Violation of any permit term or condition.
 - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - 3. A material change in quantity or type of waste disposal.
 - 4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
 - 5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].

6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
 7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:
1. A material change in the condition of the waters of the state.
 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
 3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
 4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
 5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.
 6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
 7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
1. Cause exists for termination for reasons listed in A1 through A7, of this section, and the Department determines that modification or revocation and reissuance is appropriate.
 2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports whenever a material change to the facility or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at

least sixty (60) days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility,

coverage, and liability between them.

3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G15.PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G16.UPSET

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S5 of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G17.PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G18.DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for

enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G19.TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G20.PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G21.REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G22.REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by the Department.

G23.REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

G24.REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify the Department as soon as they know or have reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
 - 1. One hundred micrograms per liter (100 µg/l).
 - 2. Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
 - 3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
 - 4. The level established by the Director in accordance with 40 CFR 122.44(f).
- B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
 - 1. Five hundred micrograms per liter (500µg/L).
 - 2. One milligram per liter (1 mg/L).
 - 3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
 - 4. The level established by the Director in accordance with 40 CFR 122.44(f).

G25.COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.